

## Tropical Animal Production (I002746)

**Course size** *(nominal values; actual values may depend on programme)*

**Credits 4.0**

**Study time 120 h**

**Contact hrs**

40.0h

**Course offerings in academic year 2022-2023**

A (semester 2)

English

Gent

**Lecturers in academic year 2022-2023**

Fievez, Veerle

LA22

lecturer-in-charge

De Smet, Stefaan

LA22

co-lecturer

Michiels, Joris

LA22

co-lecturer

**Offered in the following programmes in 2022-2023**

**crdts**

**offering**

[Master of Science in Bioscience Engineering Technology: Agriculture and Horticulture \(main subject Tropical and Subtropical Agriculture\)](#)

4

A

[Master of Science in Bioscience Engineering: Agricultural Sciences](#)

4

A

[Exchange Programme in Bioscience Engineering: Agricultural Sciences \(master's level\)](#)

4

A

**Teaching languages**

English

**Keywords**

Tropical animal science, tropical animal feeding, production systems, pastoral systems

**Position of the course**

To offer a survey of tropical animal production systems. General principles, related to climate, disease and breeding. Animal nutrition aspects of ruminants and monogastrics are addressed in relation to tropical feed quality and animal husbandry systems, including extensive pastoral systems as well as intensive production systems.

**Contents**

1. Introduction
2. Tropical and subtropical climate: effect on domestic animals & consequences for animal production
3. Animal breeding in (sub)tropical farming systems
4. Animal production in different farming systems in the tropics
  - 4.1. Ruminant production systems - Grassland-based livestock production systems - pastoralism, agropastoralism & transhumance, rangeland management
  - 4.2. Ruminant production systems - mixed (integrated) production systems
  - 4.3. Non-ruminant production systems

**Initial competences**

There are no specific requirements. Prior knowledge of anatomy, physiology and general principles of animal production is an advantage.

**Final competences**

- 1 Basic knowledge of characteristics of the most important animal production systems in the tropics
- 2 Understand the main differences between animal production in temperate and tropical areas.
- 3 Critically evaluate opportunities and constraints of animal production systems in particular tropical regions.
- 4 Critically assess opportunities and dangers of sustainable intensification based

on genetics and improved animal nutrition.

5 Demonstrate the impact of heat stress on the development of animal production systems in the tropics.

6 Demonstrate the impact of type and availability of feed resources on the development of animal production systems in the tropics.

#### **Conditions for credit contract**

Access to this course unit via a credit contract is determined after successful competences assessment

#### **Conditions for exam contract**

This course unit cannot be taken via an exam contract

#### **Teaching methods**

Microteaching, Guided self-study, Lecture, Self-reliant study activities, Seminar: coached exercises

#### **Learning materials and price**

A syllabus is available via Ufora

#### **References**

A detailed reference list is available in the syllabus.

#### **Course content-related study coaching**

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#### **Assessment moments**

end-of-term and continuous assessment

#### **Examination methods in case of periodic assessment during the first examination period**

Written examination with open questions

#### **Examination methods in case of periodic assessment during the second examination period**

Written examination with open questions

#### **Examination methods in case of permanent assessment**

Report, Participation, Assignment

#### **Possibilities of retake in case of permanent assessment**

not applicable

#### **Calculation of the examination mark**

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.